



Hypolipidemic and Antioxidant Activities of Hydrolyzed Saponins from Defatted Seeds of *Camellia oleifera* Abel.

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SUMMARY. A saponin has been isolated from the defatted seeds of *Camellia oleifera* Abel. which are always discarded, and its hypolipidemic effect is first disclosed. Hyperlipidemic mice were set up by high fat diet, blood lipids and antioxidative activities *in vivo* were analyzed after oral administration of the extracts at 50, 100 mg/kg/d for 30 days. Results showed the saponin and its hydrolyzed products had the abilities of controlling mice weight and liver coefficient, decreasing the blood lipid, and improving antioxidative levels *in vivo*, but did not cause intestinal damage. The effects were related to their molecular structures. The glycosides, tigloyl group and triterpene in the saponin may separately play an important role in adjustment of TG, TC, LDL-C and HDL-C, but tigloyl group and triterpene are more helpful to the antioxidative ability. The saponin can be a prospective medicine for body weight fatty liver control, and its hydrolyzed products are good candidates of hypolipidemic medicines.

KEY WORDS: Antioxidative activity, *Camellia oleifera*, Hypolipidemic effect, Hydrolyzed product, Saponin.

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